

MontCAS, Phase 2



*Guide to Interpreting
the 2004
Criterion-Referenced Test and
CRT-Alternate Assessment Reports*

IMPORTANT PHONE NUMBERS

If you require assistance, it's readily available through the offices listed below.

- **For information about program policy issues or incorrect data, contact:**
Judy Snow, State Assessment Director
Phone: (406) 444-3656
Email: jsnow@state.mt.us
- **For information about CRT program administration or shipping issues, contact:**
Sharon Houle, Montana CRT Program Manager
Phone (800) 431-8901, Extension 2186
Email: shoule@measuredprogress.org
- **For information on CRT-Alternate policy issues, contact:**
Bob Runkel or Marilyn Pearson
PI Division of Special Education
Phone: (406) 444-5661
Email: mpearson@state.mt.us
brunkel@state.mt.us
- **For information about CRT- Alternate program administration or shipping issues, contact:**
Susan Moore, Montana CRT-Alternate Program Manager
Phone (800) 431-8901, Extension 2237
Email: skmoore@measuredprogress.org
- **For information about ELL/LEP, contact:**
Lynn Hinch, OPI
Phone: (406) 444-3482
Email: lhinch@state.mt.us
- **For information about Title I, contact:**
B.J. Granbery, OPI
Phone: (406) 444-4420
Email: bgranbery@state.mt.us
- **For information about students with Migrant status, contact:**
Angela Branz-Spall, OPI
Phone: (406) 444-2423
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Helena, Montana 59620-2501
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The primary purpose of this guide is to support local educators' use of test data to better serve the academic needs of students and to evaluate and improve curriculum and instruction. We hope you find this guide useful as you review the results for your school or system.

If you have any suggestions about ways in which we can improve this guide in future years or if you have questions after reviewing this guide or its reports, please contact Judy Snow, State Assessment Director, Office of Public Instruction (OPI) at (406) 444-3646 or jsnow@state.mt.us.

Additional information about the Criterion-Referenced Test (CRT) and the CRT-Alternate Assessment, including Montana content standards, can be found on the OPI website: <http://www.opi.state.mt.us>.

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THE TEST

The Criterion-Referenced Test (CRT) and the CRT-Alternate Assessment are designed to measure student acquisition of the knowledge and skills in Montana content standards for reading and mathematics. The assessments in reading and mathematics were developed to provide information at the student, class, school, and system level.

BASIS FOR RESULTS

CRT

In the CRT, the pool of test items in each grade and subject area was divided into two categories:

1. The first category of items is common items that appeared in all forms of the test and were completed by all students. Student, school, system, and state results are based only on these common items, which are released annually at the time reports are shipped to system test coordinators and posted on the Office of Public Instruction (OPI) website (www.opi.state.mt.us).
2. The second category of items is matrix-sampled items. The remaining items in a grade/subject area were divided among 16 different forms of each test; each student completed one form. These items are called matrix-sampled items. A portion of the 2004 matrix-sampled items will become the set of common items in spring 2005.

CRT-ALTERNATE ASSESSMENT

The CRT-Alternate Assessment is a point-in-time test that looked at how students performed in relation to performance indicators that were expanded from the Montana reading and mathematics standards and benchmarks. Students participated in an age-appropriate activity for which the teachers were given a script, written directions, and prompting levels. Students were encouraged to engage in the activity and show performance on the indicators through appropriate prompting by the teacher administering the activity.

The teacher who administered the activity observed and scored the student on each indicator. The test activity required evidence to be collected based on the products that were created during the course of the assessment. Templates were provided for all evidence that was required.

MINIMUM NUMBER OF STUDENTS NEEDED TO GENERATE REPORTS

To ensure confidentiality of individual student results and discourage generalizations about school performance based on very small populations, OPI has established 10 as the minimum number of students for which results are reported in any particular subgroup.

Consequently, schools with a very small number of students enrolled in a grade that was tested may not show results in some sections of their school report. A school report was not generated for any school that tested fewer than 10 students in a particular grade; results for these students are included in system- and/or state-level results.

STUDENTS ELIGIBLE FOR EXCLUSION FROM SCHOOL, SYSTEM, AND STATE REPORTS

All students in accredited schools are required to participate in either the CRT or CRT-Alternate Assessment; however, the scores of the students in the following categories were excluded from the calculation of averages:

- foreign exchange students
- students not enrolled in an accredited Montana school (including home-schooled students)
- students enrolled in a private accredited school
- students enrolled in a private non-accredited Title 1 school

THE SCORES

Two types of scores are used to report performance on the CRT and CRT-Alternate Assessments—scaled scores and percentages.

SCALED SCORES

Results are reported according to levels that describe student performance in relation to Montana's established state standards: Advanced, Proficient, Nearing Proficiency, and Novice. Scaled scores in each content area range from 200 to 300. Scaled scores supplement the performance-level results by providing information about the position of a student's results within a performance level.

School and system-level scaled scores are calculated by computing the average of student-level scaled scores. Students' total number of points on the test are translated into scaled scores using a data analysis process called scaling. Using scaled scores greatly simplifies the task of understanding how a student performed.

PERCENTAGES

Percentages are another way to report the results of the test. "Percentage" refers to the percentage of questions answered correctly; the percent correct is simply the percentage of test questions that each student answered correctly.

CRT AND CRT-ALTERNATE REPORTS

The following reports of student, school, and system results are provided each for the CRT and the CRT-Alternate.

Report	Description	Explanation and sample can be found in this interpretive guide on page(s):
Student Report	This parent-guardian report provides each student's scores for the reading and mathematics tests.	CRT: 4–5 CRT-Alt: 11–12
Roster and Item-Level Report	This report provides information about class performance. Each student in the class is listed on the roster, which includes references to each item and standard it measures.	CRT: 6 CRT-Alt: 13
School Summary Report	This three-part summary shows the distribution of scores in each Montana performance level by subgroup, school, system, and state.	CRT: 7–9 CRT-Alt: 14–16
System Summary Report	This three-part summary shows the distribution of scores in each Montana performance level by subgroup, system, and state.	Sample not included. See School Summary Report sample.

PART I, THE CRT REPORTS

CRT

STUDENT REPORT

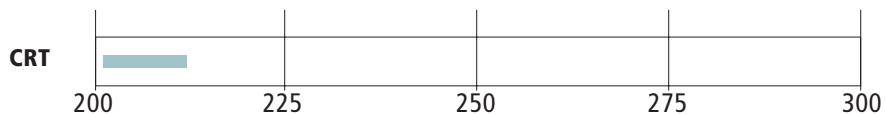
This parent/guardian report provides each student's scores for the reading and mathematics tests. The chart on page 2 of the Student Report, "Scaled Scores," reflects the

student's performance level **A** and scaled score **B** for reading and mathematics. Please refer to the performance level descriptors on the back cover of the Student Report or page 10 in this guide for additional information and resources.

Scaled Scores

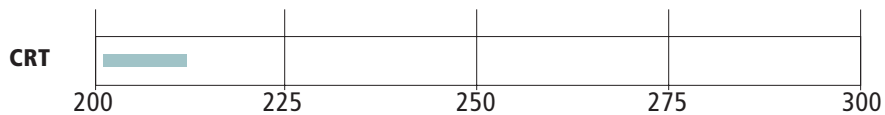
STUDENT RESULTS FOR READING

- A** → Performance Level: Novice
B → Student Scaled Score: 217



STUDENT RESULTS FOR MATHEMATICS

- A** → Performance Level: Novice
B → Student Scaled Score: 217



Contact your student's school for more information about the following symbols:

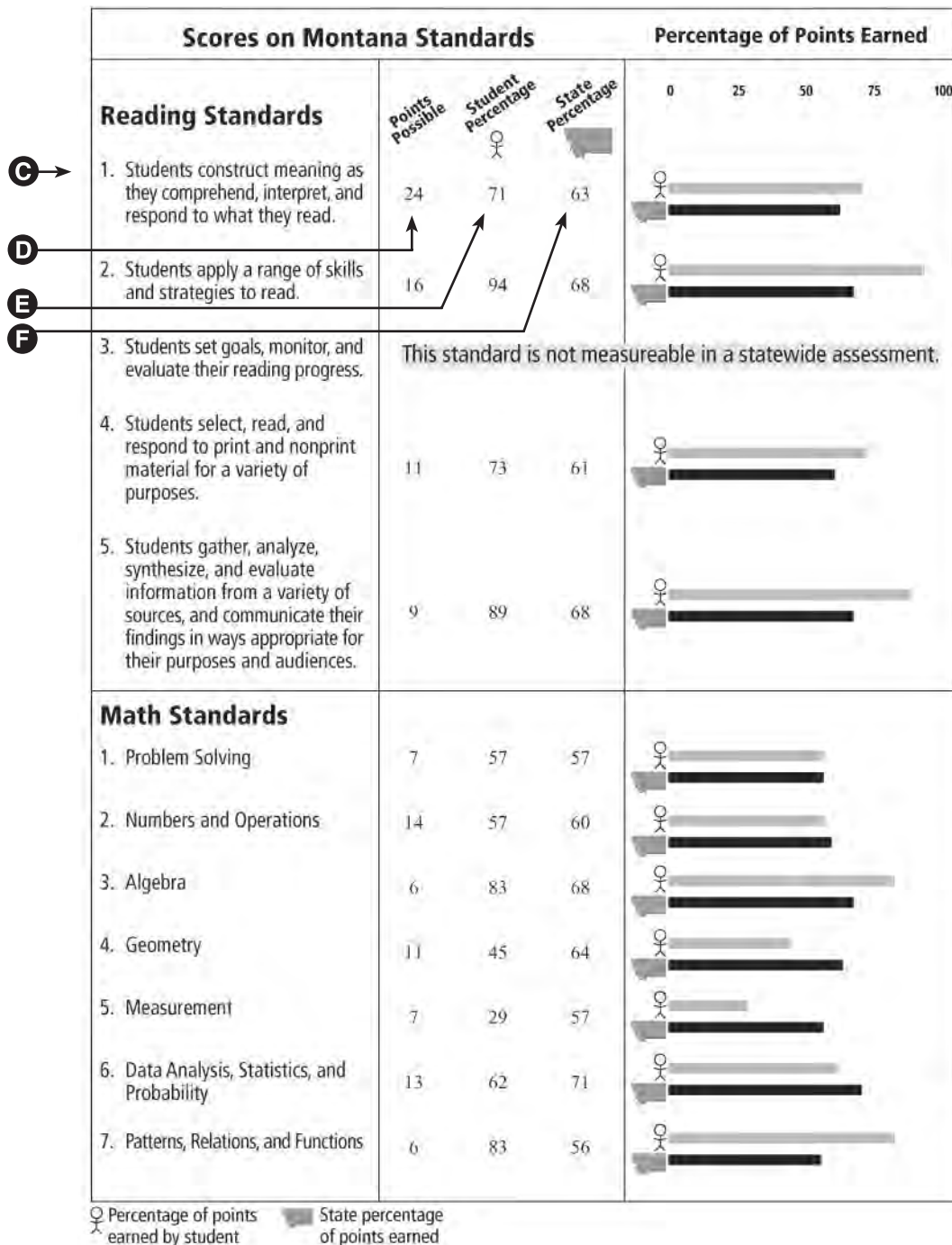
† Student did not complete the assessment. * Student did not participate in reading or mathematics.

** Student did not participate in entire test. ‡ Student participated in both CRT and CRT-Alternate. (See additional reports provided.)

§ Student took non-standard accommodation.

The chart on page 3 of the Student Report, “Scores on Montana Standards,” shows the standard for each content area assessed **C**, points possible for the number of items or

questions given **D**, the student percentage **E**, and the state percentage **F**. The percentage of points earned for each standard is depicted in the bar graph in the last column.



CRT ROSTER & ITEM-LEVEL REPORT

The Roster & Item-Level Report is presented by content area. It provides information about class performance. Each student in the class is listed on the roster. Each common item on the test **A**, the Montana content standard each item is measuring **B**, the correct answer or response **C**, and the total number of possible points **D** are presented along the top of the roster. Beside the name of the student is the

response the student chose for the item if the item was answered incorrectly **E**. If the item was answered correctly, a plus sign is printed. The two columns on the right present the scaled score for each student **F** and the performance level **G** the student attained. The end of the report lists the item average for students in the class **H**, school **I**, system **J**, and state **K** who answered each item correctly. A legend, with performance level descriptors, is located on page 10 in this guide.

READING/MATH Roster & Item-Level Report Confidential

Class: Ab
School: Ab
System: Ab

Name	A → Item Number	B → Standard	C → Correct Response	D → Total Possible Points	E →													F ↓ Scaled Score	G ↓ Perf. Level
	1	2																	
	2	3																	
	A	B																	
Jane Doe	1	1																200	N
Mike Smith																		210	N

H →	Class Average	50	61																
I →	School Average	53	58																
J →	System Average	48	56																
K →	State Average	51	58																

† Student did not complete the assessment. * Student did not participate in reading or mathematics.
§ Student took non-standard accommodation. ‡ Not in school and/or district for full academic year.
** Student did not participate in entire test † Student participated in both CRT and CRT-Alternate. (See additional reports provided.)

CRT SUMMARY REPORTS

The School and System Summary Reports are presented by content area and provide information at the school and system level. The first chart, “Distribution of scores”

A, shows the distribution of scores in each performance level: Advanced, Proficient, Nearing Proficiency, and Novice. The first column, “Scores” **B**, represents the scaled score.

The “School,” “System,” and “State” columns are each divided into three columns that represent the number of students (“N”) and the percentage of students receiving each scaled score point **C**. The last column, “% of Students in Cat.” **D**, represents the total percentage of students within the designated performance level.

The second chart, “Subtest results” **E**, reports the total points and percentage of points earned for each content standard.

The third chart, “Results for Subgroups of Students” **F**, disaggregates student data in several ways—by gender, ethnicity, school programs, etc. This data helps measure the effectiveness of instructional programs for different groups in a school. In addition, subgroup data identifies instructional practices and program characteristics that may be more effective. Finally, subgroup data enables educators to identify factors that appear to relate to performance, and compare students statewide with respect to those factors.

MontCAS, Phase 2 CRT

Reading School Summary Report

A→ I. Distribution of scores

Perf. Level	Scores	School			System			State		
		N	% of Students	% of Students in Cat.	N	% of Students	% of Students in Cat.	N	% of Students	% of Students in Cat.
Advanced	297-300									
	294-296									
	290-293									
	287-289									
	283-286									
Proficient	276-282									
	270-275									
	263-269									
	257-262									
	250-256									
Nearing Proficiency	245-249									
	240-244									
	235-239									
	230-234									
	225-229									
Novice	220-224									
	215-219									
	210-214									
	205-209									
	200-204									



E→ II. Subtest results

School:
System:
Grade:

Reading	Points Possible	Average Points Earned		
		School	System	State
Total Points	60			
1. Students construct meaning as they comprehend, interpret, and respond to what they read	24			
2. Students apply a range of skills and strategies to read	16			
3. Students set goals, monitor, and evaluate their reading progress	This standard is not measurable in a statewide assessment.			
4. Students select, read, and respond to print and nonprint material for a variety of purposes	11			
5. Students gather, analyze, synthesize, and evaluate information from a variety of sources, and communicate their findings in ways appropriate for their purposes and audiences	9			

CRT Performance Level Descriptors

Advanced
This level denotes superior performance.

Proficient
This level denotes solid academic performance for each benchmark. Students reaching this level have demonstrated competency over challenging subject-matter, including subject-matter knowledge, application of such knowledge to real-world situations, and analytical skills appropriate to the subject matter.

Nearing Proficiency
This level denotes that the student has partial mastery or prerequisite knowledge and skills fundamental for proficient work at each benchmark.

Novice
This level denotes that the student is beginning to attain the prerequisite knowledge and skills that are fundamental for work at each benchmark.

MontCAS, Phase 2 CRT

Reading

School:
System:
Grade:
School
Summary
Report

III. Results for Subgroups of Students

Reporting category	School					System					State				
	N	% in N	% in NP	% in P	% in A	N	% in N	% in NP	% in P	% in A	N	% in N	% in NP	% in P	% in A
All Students	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
Gender	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
Male															
Female															
Ethnicity															
American Indian															
Asian															
Black or African American															
Hispanic															
Native Hawaiian or Other Pacific Islander															
White															
Significant Cognitive Disability															
Educational Disability															
Students with a 504 Plan															
Title I (optional)															
Tested with Standard Accommodation															
Tested with Non-Standard Accommodation															
Alternate Assessment															
Migrant															
Gifted/Talented															
LEP/ELL															
Free/Reduced Lunch															

* Less than ten (10) students were assessed.

CRT PERFORMANCE LEVEL DESCRIPTORS

ADVANCED

This level denotes superior performance.

PROFICIENT

This level denotes solid academic performance for each benchmark. Students reaching this level have demonstrated competency over challenging subject matter, including subject-matter knowledge, application of such knowledge to real-world situations, and analytical skills appropriate to the subject matter.

NEARING PROFICIENCY

This level denotes that the student has partial mastery of prerequisite knowledge and skills fundamental for proficient work at each benchmark.

NOVICE

This level denotes that the student is beginning to attain the prerequisite knowledge and skills that are fundamental for work at each benchmark.

CRT SCALED SCORE RANGES FOR PERFORMANCE LEVELS

Grade 4

	Reading	Mathematics
Advanced	283–300	286–300
Proficient	250–282	250–285
Nearing Proficiency	225–249	225–249
Novice	200–224	200–224

Grade 8

	Reading	Mathematics
Advanced	283–300	294–300
Proficient	250–282	250–293
Nearing Proficiency	225–249	225–249
Novice	200–224	200–224

Grade 10

	Reading	Mathematics
Advanced	288–300	288–300
Proficient	250–287	250–287
Nearing Proficiency	225–249	225–249
Novice	200–224	200–224

PART II, THE CRT-ALTERNATE REPORTS

CRT-ALTERNATE STUDENT REPORT

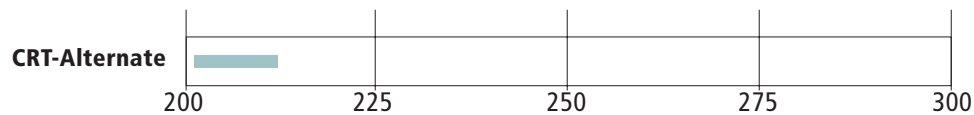
This parent/guardian report provides each student's scores for the reading and mathematics tests. The chart on page 2 of the Student Report, "Scaled Scores," reflects the

student's performance level **A** and scaled score **B** for reading and mathematics. Please refer to the performance level descriptors on the back cover of the Student Report or page 17 in this guide for additional information and resources.

Scaled Scores

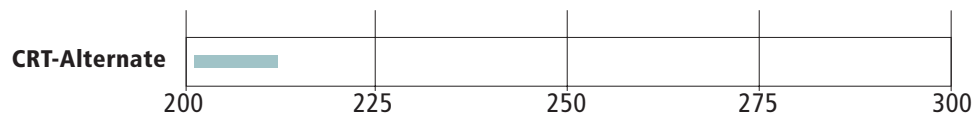
STUDENT RESULTS FOR READING

- A** → Performance Level: Novice
B → Student Scaled Score: 217



STUDENT RESULTS FOR MATHEMATICS

- A** → Performance Level: Novice
B → Student Scaled Score: 217



Contact your student's school for more information about the following symbols:

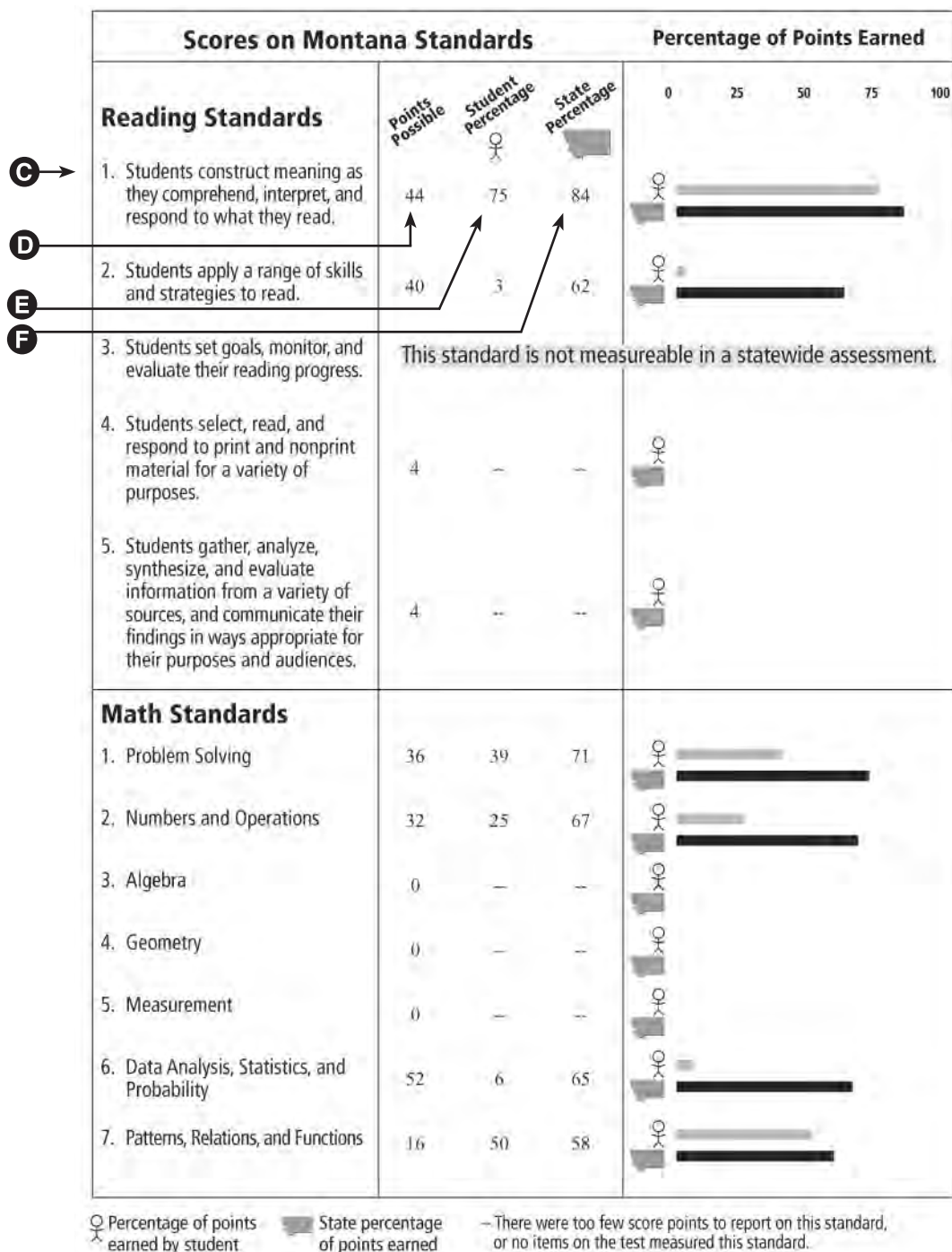
† Student did not complete the assessment. * Student did not participate in reading or mathematics.

** Student did not participate in entire test. ‡ Student participated in both CRT and CRT-Alternate. (See additional reports provided.)

§ Teacher halted the administration of the assessment after the student scored in level 1 or 0 for five consecutive items.

The chart on page 3 of the Student Report, “Scores on Montana Standards,” shows the standard for each content area assessed **C** points possible for the number of items or

questions given **D**, the student percentage **E**, and the state percentage **F**. The percentage of points earned for each standard is depicted in the bar graph in the last column.



CRT-ALTERNATE ROSTER & ITEM-LEVEL REPORT

The Roster & Item-Level Report is presented by content area. It provides information about class performance. Each student in the class is listed on the roster. Each item (performance indicator) on the test **A**, the Montana content standard each item is measuring **B**, and the total number of possible points (4 for every item) **C** are presented along the top of the

roster. Beside the name of the student is the score the student received for each item **D**. The two columns on the right present the scaled score for each student **E** and the performance level **F** the student attained. The end of the report lists the item average for students in the class **G**, school **H**, system **I**, and state **J** who answered each item correctly. A legend, with performance level descriptors, is located on page 17 in this guide.

Reading Roster & Item-Level Report Confidential

Class: Ab
School: Ab
System: Ab

Confidential																E	F
Name	A → Item Number	1	2	3	4	5	6	7								Scaled Score	Perf. Level
	B → Standard	1	4	4	2	1	1	2									
	C → Total Possible Points	4	4	4	4	4	4	4									
Jane Doe	D →	4	4	4	4	3	4	3								295	A
Mike Smith		4	4	4	4	2	4	3								270	P

G →	Class Average	4	4	4	4	2	4	3												
H →	School Average	4	4	4	4	3	4	3												
I →	System Average	4	4	4	4	3	3	3												
J →	State Average	4	4	4	4	3	4	3												

† Student did not complete the assessment. * Student did not participate in reading or mathematics.

** Student did not participate in entire test. ‡ Student participated in both CRT and CRT-Alternate. (See additional reports provided.)

§ Teacher halted the administration of the assessment after the student scored in level 1 or 0 for five consecutive items. ¥ Not in school and/or district for full academic year.

CRT-ALTERNATE SUMMARY REPORTS

The School and System Summary Reports are presented by content area and provide information at the school and system level.

School and System Summary Reports are not produced when there are less than 10 students assessed. The first chart, “Distribution of scores” **A**, shows the distribution of scores in each performance level: Advanced, Proficient, Nearing Proficiency, and Novice. The first column, “Scores” **B**, represents the scaled score.

The “School,” “System,” and “State” columns are each divided into three columns that represent the number of students (“N”) and the percentage of students receiving each scaled score point **C**. The last column, “% of Students in Cat.” **D**, represents the total percentage of students within the designated performance level.

The second chart, “Subtest results” **E**, reports the total points and percentage of points earned for each content standard.

The third chart, “Results for Subgroups of Students” **F**, disaggregates student data in several ways—by gender, ethnicity, school programs, etc. This data helps measure the effectiveness of instructional programs for different groups in a school. In addition, subgroup data identifies instructional practices and program characteristics that may be more effective. Finally, subgroup data enables educators to identify factors that appear to relate to performance, and compare students statewide with respect to those factors.

MontCAS, Phase 2 CRT-Alternate

Reading

School Summary Report

School:
System:
Grade:

A → I. Distribution of scores

Perf. Level	Scores	School		System		State	
		N	% of Students	N	% of Students	N	% of Students
Advanced	294-300						
	288-293						
	281-287						
	275-280						
	268-274						
Proficient	264-267						
	261-263						
	257-260						
	254-256						
	250-253						
Nearing Proficiency	245-249						
	240-244						
	235-239						
	230-234						
	225-229						
Novice	220-224						
	215-219						
	210-214						
	205-209						
	200-204						



E → II. Subtest results

Reading	Points Possible	Average Points Earned		
		School	System	State
*Total Points	92			
1. Students construct meaning as they comprehend, interpret, and respond to what they read	44			
2. Students apply a range of skills and strategies to read	40			
3. Students set goals, monitor, and evaluate their reading progress	This standard is not measurable in a statewide assessment.			
4. Students select, read, and respond to print and nonprint material for a variety of purposes	4			
5. Students gather, analyze, synthesize, and evaluate information from a variety of sources, and communicate their findings in ways appropriate for their purposes and audiences	4			

--There were too few score points to report on this standard, or no items on the test measured this standard.

CRT-Alternate Performance Level Descriptors

Advanced

The student at the Advanced level accurately and independently demonstrates the ability to carry out comprehensive content specific performance indicators.

Proficient

The student at the Proficient level, given limited prompting, demonstrates the ability to respond accurately in performing a wide variety of content specific performance indicators.

Nearing Proficiency

The student at the Nearing Proficiency level, given moderate prompting, demonstrates the ability to respond accurately in performing a narrow set of content specific performance indicators.

Novice

The student at the Novice level, given physical assistance and/or modeling, is supported to participate in content specific performance indicators.

*The sum of the points for each standard may exceed the total points, as some items correlate with more than one standard.

* Less than ten (10) students were assessed.

CRT-ALTERNATE PERFORMANCE LEVEL DESCRIPTORS

ADVANCED

The student at the Advanced level **accurately and independently** demonstrates the ability to carry out **comprehensive** content-specific performance indicators.

PROFICIENT

The student at the Proficient level **given limited prompting**, demonstrates the ability to respond accurately in performing **a wide variety** of content-specific performance indicators.

NEARING PROFICIENCY

The student at the Nearing Proficiency level demonstrates the ability to respond accurately in performing **a narrow set of** content-specific performance indicators.

NOVICE

The student at the Novice level, **given physical assistance and/or modeling**, is **supported to participate** in content specific performance indicators.

CRT-ALTERNATE SCALED SCORE RANGES FOR PERFORMANCE LEVELS

Grade 4

	Reading	Mathematics
Advanced	268–300	278–300
Proficient	250–267	250–277
Nearing Proficiency	225–249	225–249
Novice	200–224	200–224

Grade 8

	Reading	Mathematics
Advanced	263–300	269–300
Proficient	250–262	250–268
Nearing Proficiency	225–249	225–249
Novice	200–224	200–224

Grade 10

	Reading	Mathematics
Advanced	267–300	276–300
Proficient	250–266	250–275
Nearing Proficiency	225–249	225–249
Novice	200–224	200–224

OTHER CRT-ALTERNATE INFORMATION

To review the items (performance indicators) and the standards that correlate to the items on the test, please visit the Measured Progress website at www.measuredprogress.org.

For more information about the CRT-Alternate Assessment, please refer to the CRT-Alternate Administration Manual at either of the following websites:

The Office of Public Instruction (OPI) at www.opi.state.mt.us

or

Measured Progress at www.measuredprogress.org.

